Managing Finances

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Abstract

I use longitudinal data from the nationally representative Panel Study of Income Dynamics (PSID) to analyze the personal financial management of Black and White families in the U.S., covering 1984 through 2003. First, the greater reluctance of Black families to hold checking and savings accounts ("transaction accounts") than White families is only partially explained by regression models that consider a wide array of demographic variables. The greater reluctance impedes Black families from gaining the benefits of participating in financial markets: holding transaction accounts is positively associated with holding non-collateralized debt, for example. Second, the success of White families in managing credit is not found to exceed that of Black families. But Black families owe less credit card and other non-collateralized debt than the White families, implying either that Black families have a lower demand for such debt or that lenders are biased against them. Third, Black families are less likely to achieve wealth increases than White families, even after adjusting for differences in starting wealth, labor income and gifts and inheritances. This has implications for the continued wealth disparity between Black Americans and White Americans. Finally, differences in states' bankruptcy, foreclosure and garnishment laws are found to affect families' credit management success, the odds of holding a transaction account, and the amount of non-collateralized debt held by families.

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I. Introduction

This study examines how U.S. families manage their finances. I seek to answer three questions. First, how and why do Black and White families differ in participation in financial markets? I look specifically at the families' use of transaction accounts (checking and savings accounts) and non-collateralized debt (primarily credit cards and personal loans). Second, how do these families differ in credit management success; that is, paying bills on time and status of relationships with creditors? Third, how and why do these families differ in success at increasing family wealth over time?

These questions are significant for three reasons. First, public and private providers of financial services can be more effective in working with minority and nonminority consumers if they better understand their differences and similarities. Second, Black applicants are known to be rejected more often for mortgage loans and commercial loans than White applicants.[1] After controlling for relevant variables, if Black families display less success at credit management than comparable White families, then higher rejection rates are not surprising,[2] and the use of public resources to provide training on managing credit relationships may be as valuable as finding and punishing acts of prejudicial lending discrimination. Third, with regard to wealth management, the mean and median wealth of Black families are much lower than those of White families in the United States (Altonji, Hayashi & Kotlikoff, 2000, Blau & Graham, 1990, Oliver & Shapiro, 1990, Wolff, 1998), and movement toward wealth equality is slow at best (Bradford, 2000a). This lack of parity has been described as an endemic problem in the United States associated with free-enterprise capitalism and racism (Cotton, 1998). However, if Black families build wealth slower

[1] On mortgage lending see the articles cited by Yinger (1998) and Ladd (1998). On commercial lending, see Ando (1988), Bates (1997), Bates & Bradford (1992), Blanchflower, Levine, & Zimmerman (1998) and Cavalluzzo & Cavalluzzo (1998).

[2] This relationship leads to statistical discrimination (Phelps, 1972). Firms use race to infer likelihood of default on the loan. Here, discrimination does not reflect prejudicial discrimination (as discussed by Becker, 1971, for example) but rather an attempt to minimize costs of gathering more information.

than economically and demographically comparable White families, then the financial decisions of Black families are at least partially responsible for sustaining the wealth gap.[3] This would imply that *both* the financial management decisions of Black families and the socioeconomic system should be changed if more evenly distributed wealth is the goal.

In this paper, I use longitudinal data from the nationally representative Panel Study of Income Dynamics (PSID), which allows me to follow and observe the financial management and demographic information of the families over time. The data extend from 1984 through 2003, although not all of the analyses cover this entire period. An interesting feature of the analysis is the role of garnishment and bankruptcy laws on family financial management. Previous studies have focused on how these laws affect the reactions of families to financial difficulty. I put more emphasis on how bankruptcy and garnishment laws affect the entry of families into financial difficulty. The findings of this study can be summarized in reference to the three questions as follows.

1. Credit management. This study examines the credit management of Black and White families from 1989 through 1996, based upon self-reported data from the PSID respondents. Credit management includes the frequency of families' problems paying bills, and creditors calling to demand payment, wage attachments, liens against and repossessions of property, and bankruptcy. In univariate analyses, White families achieve greater success rates than Black families in credit management. However, logistic regressions show that after controlling for demographic and financial variables, the credit management success of Black families is equal to or greater than that of White families. Black families that owe non-collateralized debt achieve greater success at avoiding the most severe financial outcome—e.g., liens, garnishments and bankruptcy—than do White families that owe this form of debt.

[3] The focus here is on changes in wealth instead of accumulated wealth. The latter reflects the activities of prior periods, not necessarily the wealth management over the current period. Most researchers have developed models that observe wealth accumulation instead of wealth changes. (See Altonji et al, 2000; Blau & Graham, 1990; Hurst, Luoh & Stafford, 1998; and Menchik & Jianakoplos, 1997.)

2. Wealth management. In univariate comparisons for 1989 through 1999, Black families achieve lower levels of wealth management success in—terms of whether wealth increases and the size of the increase—than White families of the same category (married couples, single male, single female). In the logistic regressions predicting whether wealth increases in the 1989-99, I find that the wealth of Black families is less likely to increase and the size of the wealth increase is lower for Black families even after controlling for a wide array of independent variables, including starting wealth, labor income, and the receipt of inheritances. I test GLS models that predict the amount of the wealth increase for families, and the same disparity holds for Black families in comparison to White families. The differences between Black Families and White families in wealth accumulated are found to be related to differences between the two sets of families in how labor income, starting wealth and credit management impact wealth changes.

3. The use of transaction accounts and non-collateralized debt. Using PSID data for 1984 and 2003, I find that a lower percentage of Black families hold transaction accounts than do White families in each income quartile and each wealth quartile for both 1984 and 2003. While the percentages of Black and White families holding transactions accounts became smaller over the 19-year period, the gap remains large: 56% of Black families held transaction accounts in 2003, compared to 86% for White families. Logistic and GLS regressions show that Black families are less likely to hold transaction accounts than White families even after controlling for demographic traits, family income and family wealth. For those families that do have transaction accounts, Black families hold lower dollar amounts than do White families. With regard to non-collateralized debt, Black families owe more non-collateralized debt in the top two wealth and income quartiles but less in the bottom two quartiles. The regressions show that, controlling for the effect of the independent variables, Black families are less likely to owe non-collateralized debt than comparable White families; and for families that owe this form of debt, Black families owe less than White families.

Each of the above analyses considered how differences in garnishment, foreclosure and bankruptcy laws predict differences in how well family finances are managed. Prior studies have found that such laws—which differ among states—affect the amount of debt that families hold and the likelihood of the family declaring bankruptcy. This study also considers how the laws affect wealth management, the amount of transactions accounts and the likelihood of the family having trouble paying its bills. I find that for all measures of credit management, families report less success in credit management when garnishment is allowed. I do not find that wealth management success is affected by bankruptcy and garnishment laws. States in which unlimited home bankruptcy exemption increases the odds of holding a transaction account, but not the amount in the account. Unlimited home bankruptcy increases the odds of holding non-collateralized debt for White families, but not for Black families. The unlimited home bankruptcy exemption also increases the amount of non-collateralized credit held by Black families, but not by White families.

Some implications of our findings are as follows. First, the greater reluctance of Black families to use checking and savings accounts than White families remains largely unexplained. The reluctance can be an impediment to the benefits of participating in financial markets. For example, holding a transaction account is positively associated with holding non-collateralized debt. Second, the result that Black families perform as well as or better than White families in credit management, along with the lower likelihood of Black families owing non-collateralized debt implies either that Black families have a lower demand for such debt or that lenders impose prejudicial lending bias against these families. Third, the finding that Black families are less likely to achieve wealth increases than White families even after adjusting for differences in starting wealth, labor income and inheritances has implications for wealth disparity between Black Americans and White Americans. White families--even low-wealth White families--have a greater propensity to inherit wealth, and studies have found that labor markets discriminate against Black workers (Holzer & Neumark, 2000). To the extent that gifts, inheritances and labor

income are distributed in the favor of White families, Black families will generate lower levels of wealth increases than will White families in the United States. But our findings are that other relationships are also at play; thus more research on how Black families manage their wealth will add more light to the causes of the wealth gap.

In the following section, I discuss the data and the measures of participation in financial markets, credit management and wealth management that will be analyzed in the study. Next, I discuss hypotheses and methodology, and provide descriptive statistics on the data. Then, I present the results of the tests, and finally provide my conclusions.

II. Data and Financial Measures

Data

The PSID is an annual longitudinal survey of a national sample of U.S. households conducted by the Survey Research Center of the University of Michigan. The total sample is representative of the U.S. population when sample weights provided by PSID are used. Black and low-income families were initially oversampled in the PSID, [4] so I have used weights throughout this paper to adjust for both the differential initial sampling probabilities and the differential nonresponse that has arisen since the beginning of the study in 1968.[5] Starting in 1984, PSID has gathered wealth data on its panel families: at five year intervals from 1984 through 1999, and 2-year intervals starting in 2001.[6] I use the amount and components of the

[4] These data contain essentially only Black and White families. Other ethnic groups (Latinos, Asian, and Native Americans) are not represented in the sample.

[5] Attrition averages about 3% from 1 year to the next. About 60% of the original sample was still being interviewed in 1998. Researchers who have compared PSID with other data have concluded that these weighting procedures make the study representative of the nonimmigrant U.S. population (Hill, 1992).

[6] Wealth includes real estate (own or main home, second home, rental real estate, land contract holdings), cars, trucks, motor homes, boats, farm or business, stocks, bonds, mutual funds, savings and checking accounts, money market funds, certificates of deposit, government savings bonds, Treasury bills, IRAs, bond funds, cash value of life insurance policies, valuable collections for investment purposes, and rights in trust or estate, less mortgage, credit card, and other debt on such assets. This measure does not include wealth in the form of private pensions or expected Social Security retirement benefits. I add two observations about the PSID wealth data here. First, PSID does not capture wealth information on households at the very top of the wealth distribution. The majority of the measurement problems in PSID occur beyond the 98th percentile of the wealth distribution, possibly even beyond 99.5%. Juster, Smith. and Stafford (1999) found that the PSID wealth data for 1989 lined up closely with those from the 1989

families' wealth for the years 1984, 1989, 1994, 1999 and 2003. I also follow the changes in wealth of families with the same head of household from 1989 to 1994 and from 1994 to 1999. In 1996, PSID included a series of questions on the financial difficulties of the family between 1991 and 1996. This supplement includes information about whether families have difficulty in paying bills when they were due, and their experiences with debt creditors demanding payment, wage attachments, and liens against and repossessions of property. I also report results of analyses of this supplement in this paper.

Measures of Participation in Financial Markets

Families participate in financial markets through the nature of the assets they hold and the ways in which they finance their assets and expenditures. Previous studies have examined the participation of families in purchasing homes. Although home ownership is included as a variable in my analyses, here I observe (a) the holding of transaction accounts at financial institutions—checking and savings accounts—and (b) the use of non-collateralized debt. Non-collateralized debt, which is reported in the PSID wealth data, includes credit cards, student loans, medical or legal bills, and personal loans; it does not include mortgages and automobile debt. However, the analyses of credit management below include the experiences with all types of creditors, including home and automobile credit.

Measures of Credit Management

The questions in the 1996 PSID supplements are paraphrased below:

Between 1991 and 1996 did you:

a. *Find yourself unable to pay your bills when they were due?*
b. *Have a creditor call or come to see you to demand payment?*
c. *Have your wages attached or garnisheed by a creditor?*
d. *Have a lien filed against your property because you could not pay a bill?*
e. *Have your home, car, or other property repossessed?*

Survey of Consumer Finances through the 99.5 percentile. Of course, a major concern in this study is the experience of African Americans, who are oversampled by PSID and who are considered to be underrepresented in the top 99.5 percentile of wealth holders in the United States. (Hurst, Luoh, & Stafford, 1998)

f. File for bankruptcy? [7]

The survey obtained information on both the timing and frequency of the incidence of these credit problems. The concept of credit management success is paying bills on time and maintaining good relationships with creditors. I quantify credit management success along a discrete continuum, based upon the responses to the above questions. Families can be divided into four groups:

CRM1: Families that had no trouble paying bills, and none of the problems below.

CRM2: CRM1 families plus families that experienced troubles paying bills.
But no: Creditors called, garnishment, liens, repossessions or bankruptcy

CRM3: CRM2 families plus families that experienced calls from creditors.
But no: garnishments, liens, repossessions, or bankruptcy.

CRM4: CRM3 families plus families that experienced garnishments, liens or repossessions.
But no: bankruptcy.

Successful families under CRM1 had no problems paying bills when due, and no problems with creditors. Success at CRM2 means no trouble with creditors, although some successful families under CRM2 had difficulty at some point paying bills when due. A family's credit management is successful under CRM3 if no creditors pursued such legal measures as garnishments, liens and property repossessions and the firm did not declare bankruptcy.[8] But success families under CRM3 include some families that creditors called to inquire about payment. A family is successful under CRM4 if it does not declare bankruptcy; but some families in this category have experienced the other negative relationships with creditors, including garnishments and repossessions.

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[7] The questionnaire also asks about the use of debt consolidation loans. We do not use those responses because of the ambiguity of interpreting what those responses indicate. Unlike the other questions, the question on bankruptcy asks and obtains information about any declaration of bankruptcy, including those that occurred before 1991.

[8] Instead of considering bankruptcy alone, I added the other measures of severe financial distress to CRM3. This helps to avoid problems caused by the relationship between the bankruptcy decision and the bankruptcy laws of the state in which the family resides. It is likely that the other items under CRM3 happen when the severe financial distress associated with bankruptcy occurs, even when bankruptcy is not declared.

Measures of Wealth Management

The wealth changes of the families will be measured in two five year periods: 1989-94 and 1994-99. Four measures of success at wealth management will be observed. The first category is based on whether the family's wealth increased over the five-year period. Assuming away complexities associated with timing, the wealth at the end of the period, W_e, is equal to the wealth at the start, W_s, plus the net change in the value of the wealth claims held over the period, ΔW_s, plus income earned, Y, plus gifts and inheritances received, G, less expenditures, E.

$$W_e = W_s + \Delta W_s + Y + G - E$$

E represents expenditures for consumption, contributions, gifts to others, medical expenses, etc. over the five-year period. The measures of wealth management make different adjustments to changes in wealth. The first measure reflects whether or not family wealth increased over the five year period. Thus WLM1 is defined as

$$\begin{aligned} WLM1 = 1 \text{ if } & W_e - W_s = \Delta W_s + Y + G - E > 0 \\ = 0 \text{ if } & W_e - W_s = \Delta W_s + Y + G - E \leq 0 \end{aligned}$$

The second measure subtracts out gifts and inheritances from the change in wealth to adjust for wealth changes due to gifts and inheritances.

$$\begin{aligned} WLM2 = 1 \text{ if } & W_e - W_s - G = \Delta W_s + Y - E > 0 \\ = 0 \text{ if } & W_e - W_s - G = \Delta W_s + Y - E \leq 0 \end{aligned}$$

If Black and White families managed wealth equivalently except for the exogenous inheritance received by White families, then there should be no difference in WLM2 between White and Black families. The third measure, WLM3, adjusts by subtracting out labor income from WLM1. If labor income is systematically lower, for example, for Black families (due to current or past racial biases), subtracting out labor income can provide a clearer picture of the ability to build wealth without the differences that occur because of different experiences in the labor markets.[9]

$$WLM3 = 1 \text{ if } W_e - W_s - Y_L = \Delta W_s + G + Y_O - E > 0$$

[9] The degree to which Black workers receive lower wages because of racial discrimination is a topic of ongoing controversy. See Holzer and Neumark (2000).

$$= 0 \text{ if } W_e - W_s - Y_L = \Delta W_s + G + Y_O - E \leq 0$$

where Y_0 denotes other (nonlabor) income. Finally, the fourth measure, WLM4, takes out both gift or inheritance inflows and labor income:

$$WLM4 = 1 \text{ if } W_e - W_s - G - Y_L = \Delta W_s + Y_O - E > 0$$
$$= 0 \text{ if } W_e - W_s - G - Y_L = \Delta W_s + Y_O - E \leq 0$$

Two comments on this category of wealth management are relevant here. First, it is likely that funds will move in and out of the categories in ΔW_s within the 5-year period instead of just at the endpoints. One can define ΔW_s to include such intermediate flows without a loss of relevance for the measures here. Second, all of the measures in wealth management are in current dollars. Current dollar measures are the most clear to the family unit as it evaluates its financial position. The family will translate the changes in current dollar wealth to changes in constant dollar wealth depending on the change in the cost of the goods and services it expects to consume. This can differ for each family, and data on these differences are not available.

III. Methodology, Hypotheses and Descriptive Statistics

Methodology

The participation of families in the financial markets (holding transaction accounts or non-collateralized debt) will be analyzed through regressions that gauge the impact of race while considering the impact of other family traits. For example, the logistic regression model estimates the likelihood—log odds to be exact—that a family holds a transaction account, as a function of the independent variables:

LO_T = log odds (family holds transaction accounts) = F[Race; Other Independent Variables]

I use GLS regressions to predict the impact of race on the amount held for those who hold transaction accounts or non-collateralized debt:

V_T = Dollar amount of transaction account = F[Race; Other Independent Variables]

In addition to the head of the family's race, the independent variables are the head of the family's age, education, health, marital status, gender, employment status, the number of children in the family and other dependents; and whether the head or spouse receives public assistance (ADC/AFDC, SSI or other welfare payments). The descriptive variables relate to those reported as of the start of the five-year period observed. Appendix A describes all of this study's independent variables. Finally, I include real total family income and family wealth, both in 1999 dollars. The same model holds for L_D, the log odds that the family owes credit cards and other non-collateralized debt.

In the case of credit management, the logistic regression model estimates L_{Ci}, the likelihood that a family achieved success in credit management CRMi (i = 1- 4) as a function of the dependent variables:

LO_{Ci} = log odds (CRMi = 1) = F[Race; Other Independent Variables]

Here, I follow the experience of each of the families from 1989 to 1994, and again from 1994 to 1999. In addition to the independent variables mentioned above, I also include whether the head or spouse (for married couples) received gifts or inheritances during the period studied, and the education level and health status of the spouse. The model and independent variables used for wealth management are similar to those of credit management. The log odds, $L_{W,}$ associated with the discrete measures WLM1-WLM4 is a function of the independent variables in the logistic models. Thus

LO_{Wi} = Probability (WLMi = 1) = F[Race; Other Independent Variables]

The treatment of gifts and inheritances in WLM1–WLM4 is different from that in the credit management tests. The receipt of gifts and inheritances is omitted from the independent variables in the regressions for WLM1–WLM4, because the dollar amount of gifts and inheritances is a component of WLM1–WLM4. In the analyses of the magnitude of the changes in wealth, the following relationships are assumed:

$W_e - W_s = F[\text{Race; Other Independent Variables}]$

where W represents family wealth. GLS regressions are used to determine the impact of race and other variables on (a) the dollar amount of transaction accounts held by the family, (b) the dollar amount of credit card and other non-collateralized debt, and (c) the change in the wealth of the sample families. We used GLS random effects instead of OLS. The GLS random effects process adjusts the regression coefficients and standard errors for the interrelationships among the families. That is, some of the families are observed five times in the five snapshots (1984, 1989, 1994, 1999 and 2003). The regressions for wealth management include CRM1 as an independent variable. This provides an analysis of the association between credit management and wealth management. I include a dummy variable indicating whether the family holds a transaction account (Yes = 1, No = 0) in the analyses of non-collateralized debt, credit management and wealth management. This allows me to pursue the issue of how holding a transaction account is associated with these areas of family financial management.

Finally, I added special data on state garnishment, foreclosure and bankruptcy laws to the basic PSID data. If garnishment, foreclosure and bankruptcy laws affect lenders' credit supply functions, families' financial planning before experiencing financial difficulties and families' reactions to financial difficulties, then these laws play a role in credit management. Garnishment enables a creditor to claim part of a debtor's wages. But states differ in how easy it is to garnish and in the amount of wages that are exempt from garnishment. The most commonly cited reason for filing a bankruptcy petition is the initiation of some other collection remedy such as garnishment. Twenty-one states require a judicial foreclosure process in which the lender must proceed through the courts to foreclose on property held as collateral for a loan. These states are primarily concentrated in the northeast and midwest regions of the U.S. In all other states, lenders have the option of using a simpler, quicker and cheaper nonjudicial procedure called "power of sale".

Bankruptcy exemption laws specify the type and amount of property that can be claimed by creditors in Chapter 7 personal bankruptcy proceedings. Exemptions are divided into homestead exemptions that cover real estate and personal exemptions that cover other assets. The effect of differences in garnishment, foreclosure and bankruptcy exemption laws on bankruptcy rates is ambiguous a priori. If the penalty for bankruptcy declines (increases), the demand for credit will rise (fall), but creditors will reduce (increase) their supply of credit, and the impact on the bankruptcy rate is ambiguous. For example, higher exemptions (a less severe penalty) could increase the bankruptcy rate by increasing the likelihood of default, but higher exemptions could also lower the bankruptcy rate by reducing the percentage of the population that obtains credit. Similarly, if it is easy to garnish wages, creditors may feel more certain that they can collect, the supply of credit may go up, and the number of people in debt and the bankruptcy rate may rise. Or, easy garnishment might discourage people from borrowing and reduce the bankruptcy rate. The effect of differences in the law on differences in the bankruptcy rate depends on which force outweighs the other and can only be determined empirically. Empirical work has not yielded consistent results. Berkowitz and White (2004) and Gropp, Apilado, Dauten and Smith (1978) find that more severe garnishment law (when a lower percentage of wages were exempt from collection) increases the bankruptcy rate, and that lower exemption levels reduces the bankruptcy rate. In contrast, Buckley and Brining (1998) find that higher exemption levels reduce the bankruptcy rate. Schulz and White (1997) find evidence that borrowers in high exemption states are more likely to be turned down by creditors, while Fan and White (2001) find that high exemptions tend to promote entrepreneurship. Using a sample of credit card holders, Dawsey and Ausubel (2002) find that more severe garnishment law makes it less likely a debtor will default, but more likely that a defaulting debtor will file for bankruptcy. Shiers and Williamson (1987) did not find a statistically significant relationship between garnishment and bankruptcy rates and concluded that higher exemption levels were associated with lower bankruptcy rates.

The issue I pursue is the predictive content of these laws on the measures of credit management *before* bankruptcy. The more that these laws affect the decisions about borrowing, spending and saving, the more effect we should find in families having trouble paying bills—even if the families were able to cleanly resolve the money issues. Thus our questions become 1) to what extent do garnishment, foreclosure and bankruptcy laws affect 1) wealth management of families, 2) outcomes such as families having trouble paying bills, getting calls from creditors, and repossessions or liens filed against family assets, and 2) families' reactions to financial difficulty?

Hypotheses

It is expected that, controlling for demographic variables, the participation of Black and White families in financial markets are not different. As noted earlier, the analyses focus on transaction accounts and non-collateralized debt. Thus, the specific hypothesis is that, controlling for demographic variables, Black and White families do not differ in the holding of transaction accounts and the use of non-collateralized debt.

With regard to credit management, I hypothesize that credit management is positively related to age and education. Age and education should increase accumulated knowledge about effective short-term money management. Married couples are expected to achieve more success in credit management than families headed by single people. The former potentially have two people discussing and participating in money matters. Several of the independent variables describe possible positive or negative shocks to the family's budget. Poor health is expected to have a negative impact on credit management.[10] The receipt of a gift or inheritance and the receipt of public assistance are expected to have positive impacts on credit management. The number of children and the number of dependents outside of the family are expected to have negative impacts on credit management.

[10] Smith (1995) found that healthier households are wealthier households. The direction of causality is tricky. The relationship between health and credit management is examined here.

Based on previous studies, I hypothesize that homeownership has a negative impact on credit management (Hurst & Stafford, 1998). Mortgage payments reduce budget flexibility, and some families overcommit funds in purchasing a home. With regard to work status, I expect that being unemployed relative to self-employment, earning a wage or salary both have a negative impact on credit management. Self-employment has been found to increase wealth at a faster rate over time than wage or salary status (Bradford, 2000b; Quadrini, 1999), and thus funds to manage the family's finances should be more plentiful. Retirement status is expected to have positive effect, compared to self-employment. Retirees presumably have more time to manage finances, and typically their budgets are simpler and (except for health) more predictable.

The relationship between a family's credit management and accumulated wealth is analyzed by including wealth at the start—family wealth in 1989. I hypothesize that higher wealth has a positive impact on credit management. At lower wealth levels, the family has less to draw on to make payments when unforeseen outflows occur. No difference is expected between single female- and single male-headed families in credit management. A major focus of this study is the financial management of Black families compared to White families. I hypothesize that race has no statistically significant impact on credit management after considering the impact of the other variables.

Prior studies have focused on predicting wealth accumulation instead of changes in wealth. This is because most sources of wealth data do not follow the same families over an extended time period. The relationships between wealth management and the independent variables are hypothesized to be the same as those for credit management except for two items. First, unlike the negative relationship hypothesized between credit management and homeownership, a positive relationship is expected between wealth management and homeownership. The family will have a greater motivation to own a home as its wealth increases, for tax and investment purposes as well as the mental satisfaction of homeownership. Second, it is expected that the coefficient on race is negative for WLM1 but declines in influence

going from WLM1 to WLM4. WLM1 reflects whether the wealth of the family increased. The differences between Black families and White families in the probability of wealth increases are expected to be associated with differences in gifts, inheritances, and labor income. WLM2 subtracts out gifts and inheritances, WLM3 subtracts out labor income, and WLM4 subtracts out both. To the extent that the probabilities of increases in wealth are similar for Black families and White families except for the differences in gifts, inheritances, and labor income, then the race variable will become less influential as one moves from WLM1 to WLM4. Finally, the dollar amount of gifts and inheritances and labor income are included as independent variables in the regressions that predict the dollar amount of changes in wealth. It is expected that both of these variables have a positive impact on changes in wealth over the period observed.

Descriptive Statistics

Table 1 contains various statistics on the families in 1984 and 2003. Each year is a snapshot of the demographic and other data on all of the PSID families. Table 1 shows that the heads of the Black families were about three years younger on aver than the heads of the White families. In addition, the heads of Black families had less education, 34% had more than high school education in 2003 compared to 53% for heads of White families. In general, the health and economic status of the Black families improved relative to those of White families in the 19-year period observed, although in 2003 sharp differences still existed. The percent of Black family heads reporting bad health decreased from 30% to 25%, while the same percent for White family heads remained the same at 15%. Another example is that the median family wealth of White families was 16.0 times that of Black families in 1984, but this decreased to 10.5 times in 2003. The bottom section of Table 1 reports that both Black family wealth and income improved relative to those of White families between 1984 and 2003. In that 19-year period, the proportion of Black families in the top wealth quartile increased from 4.0 percent to 4.9 percent; while the proportion in the bottom wealth quartile fell from 54.3

percent to 49.3 percent. Similar improvements were shown in the statistical profile of Black family income. But sharp differences still exist in 2003: 80 percent of Black families are below the median wealth of all families, while 46 percent of White families are below the median wealth of all families.

As discussed earlier, PSID information on the families' financial difficulties between 1991 and 1996 is utilized for this study. The outcomes were separated into two segments: 1989-94, and 1994-99. This enables me too match the outcomes to the periods over which wealth changes are known. Table 2 contains the summary statistics on the observations. The first two columns describe all of the White families and all of the Black families, respectively. The next six columns compare White and Black families by category: married couples, single males and single females. Success in CRM1 means that the family experienced no trouble paying bills and no action against the firm by creditors. Overall Black families are less successful in CRM1, and the major reason is that Black married couples are less successful than White married couples in attaining success in CRM1. Only very small differences exist between Black and White families in success at CRM2, CRM3 and CRM4. For both sets of families, married couples are slightly more likely to achieve success in these measures of credit management than are single males and single female households.

In terms of wealth management, our measures of wealth management adjust for differences between the families in gifts/inheritances and labor income. Table 2 shows that overall, Black families are less successful than White families in all of the measures of wealth management. In addition, all of the subgroup analyses show a higher success rate for White families than for Black families. Similar to the relationships in Table 1, Table 2 also shows that the mean starting wealth and labor income of the Black families are less than those of the White families, and this also holds for each category of Black family in comparison to its corresponding White family. In addition, the mean change in

wealth of the White families is larger than that of the Black families; with the largest difference being the disparity of single White females over single Black females. A smaller fraction of Black families report gift and inheritance income than do White families, and this relationship holds for each category of family. Not shown in the table is that, of those families reporting gifts and inheritances, the mean for White families is $33,652, and the mean for Black families is $23,917.

IV. Test Results: Credit Management

Basic Results

Table 3 contains the results of the logistic regressions for credit management. The dependent variables in the credit management regressions are CRM1 through CRM4. The credit management regressions show that, after considering the impact of the other variables, Black families are less successful than White families in CRM1, equally successful in CRM2, and more successful in CRM3 and CRM4. Thus controlling for the other variables, Black families are more likely to feel financial pressure in terms of being able to their bills. This might reflect the greater complications of larger family size, and more dependents outside of the family reported by the Black heads of household. But Black families do not experience calls from creditors more than White families, once the other variables are controlled for. The greater problems experienced by the Black families are sufficiently resolved such that they are as successful in avoiding creditors' calls. Black families are more successful than White families in CRM3 and CRM4. That is, Black families are more successful in avoiding creditors' taking legal actions to collect overdue bills—including liens and foreclosure—and to avoid bankruptcy. With regard to the other relationships, we find that increasing the garnishment of wages reduces the credit management success rate of the families. This finding holds for all of the measures of credit management. However, requiring judicial foreclosure—a negative requirement for the lender—is also negatively associated with CRM1 through CRM3. In contrast, the amount of

property exemptions allowed at bankruptcy does not have an impact on credit management except for CRM4. In the CRM4 regression, families in the highest exemption states have a greater likelihood of bankruptcy avoidance. Also, the state bankruptcy rate, while being statistically insignificant in the regressions for CRM1 through CRM3, is statistically significant and negative in the regression for CRM4. The state's lagged bankruptcy affects bankruptcy but does not affect the other measures of credit management. In terms of the other relationships, married couples are less successful than single male households in each of the measures of credit management. As the number of children at home and the number of outside dependants increase, the likelihood of success declines for CRM1 and CRM2; these same relationships hold but are not statistically significant for CRM3 and CRM4. Older age and retirement are positively related to success at credit management. Education does not appear to have significant impact on credit management. Better health for the head and better health for the spouse are positively related to success at credit management for CRM1 and CRM2, but not statistically significant in CRM3 and CRM4. Receiving public assistance is positively related to credit management for CRM1 and CRM2 but negatively related for CRM3.

Self-employment is the reference category in the variables that express work status. For CRM1 and CRM2, self-employment is positively related to credit management success, compared to retirement and unemployment, and has no differential impact compared to the worker category. For CRM3, however, the negative coefficient for the three categories implies that the self-employed have more severe financial problems such as liens and bankruptcy than workers, retirees, and the unemployed. The impact of gifts and inheritances differs among the measures of credit management. For CRM1, the impact is negative, but for CRM2 and CRM3, the impact is positive. The coefficient for CRM3 is not statistically significant. The negative impact for CRM1 may reflect family heads that had difficulty in paying bills (thus unsuccessful in CRM1) and then requested and received funds from relatives. The receipt of those funds enabled the families to achieve relatively better outcomes in CRM2 and CRM3. The relationship

between the spouse's education and credit management is inconsistent for CRM1 and CRM3, but for CRM2 credit management success is positively associated with the spouse's education. The association between income and credit management success is not statistically significant for CRM1 but is positive and statistically significant for CRM2 and CRM3. More income enables the family to avoid serious financial difficulty. With regard to the association between credit management and accumulated wealth, as the level of family wealth increases, the odds of credit management success improve. Credit management success increases with the family's wealth.

Credit Management and Transaction Accounts.

Does holding a transaction account have predictive content for success at credit management? Table 4 also reports the results of separate group regressions with transactions accounts added as a regressor. In the regression of the combined families (2), with the addition of the transaction account indicator the Black family coefficient becomes statistically insignificant in CRM1 but changes little in the regressions for CRM2 – CRM4. Also in the combined regression holding a transaction account has a positive and statistically significant effect on CRM1 and CRM2, but is not statistically significant for CRM3 and CRM4. For the Black family regressions (3) holding a transaction account is not statistically significant for CRM1, but is positive and statistically significant for CRM2 – CRM4. The opposite holds for the White families (4): holding a transaction account is positive and statistically significant for CRM1, but not for CRM2 – CRM4. Regressions 4 and 5 (table 4) indicate that the difference between the Black and White families in CRM1 is due to how Black and White families holding transaction accounts fare in CRM1. For CRM1, Black families holding transaction accounts fare worse than White families; but for families not holding transactions accounts the difference between Black families and White families is not

statically significant. In addition, the better showing of Black families in CRM3 is due to the better performance of Black families that hold transaction accounts compared to their corresponding White families. Finally, holding a transaction account has a positive impact on credit management for CRM1 but is not statistically significant for CRM2 and CRM3.

Credit Management and Non-collateralized debt.

We now look at the relationship between holding non-collateralized debt and credit management. To what extent do Black and White families differ in how owing non-collateralized debt is associated with success in credit management? Table 3 reports that compared to White families, Black families were less successful in CRM1, did not differ in CRM2 and more successful in CRM 3 and CRM4. This is highlighted in regression 1 of table 4, which shows the regression coefficients for CRM1 through CRM4 for the Black family indicator variable. The regressions in table 3 did not consider whether the families held non-collateralized debt. Regression 2 in table 7 shows that when NC Debt is controlled for (added to the regression), the Black families' performance relative to those of the White families declines: The performance of the Black families in CRM1 and CRM2 becomes even less favorable, and the positive Black family coefficient for CRM4 goes from statistically significant to statistically insignificant. We also find that the indicator for NC Debt is negative and statistically significant for all measures of credit management, indicating that NC Debt is associated with less favorable credit management.

In order to understand the relationship between I calculated separate group regressions with non-collateralized debt added as a regressor. For both Black and White families, NC debt is negative and statistically significant for CRM1 and CRM2. But for CRM3 and CRM4, while NC debt is negative and statistically significant for White families, it is not statistically significant for Black families. This indicates that Black families with NC Debt have more success in CRM3 and CRM4 than White families with NC Debt. This is confirmed in regression 5, which looks only at families with NC debt.

Regression 6 indicates that for families with no NC Debt, the difference in performance between Black and White families is statistically significant only in CRM1, with Black families achieving less success in that measure. To return to our original results comparing the performance of Black and White families reported in table 5, Black families achieve favorable results in CRM3 and CRM4 at least partially because Black families with non-collateralized debt perform better in these measures than do White families with non-collateralized debt. The performance of Black and White families without non-collateralized debt in CRM3 and CRM4 are not found to differ.

V. Test Results: Wealth Management

Table 5 contains the results of the logistic regressions utilizing the discrete measures of wealth management: WLM1–WLM4. The coefficient reflecting race is negative and statistically significant for all of the measures. Thus, even adjusting for labor income, starting wealth and gifts/inheritance, the changes in wealth for the White families exceed those of the Black families. Credit management, as measured by CRM1 is positively associated with all of the measures of wealth management. Holding a transaction account does not have a statistically significant relationship with wealth management success. Public assistance status is positively associated with each of the measures of wealth management. The coefficients for single male and single female are negative and statistically significant for WLM1 and WLM2, but they are positive and statistically significant for WLM3 and WLM4. Relative to married couples, single males and females experience lower increases in wealth before and after adjusting for gifts and inheritances. The positive coefficients for WLM3 and WLM4 indicate that single males and females, in comparison to married couples, achieve higher levels of nonlabor income plus gains on wealth holdings less expenditures.

Table 5 also shows that age has a small negative impact on wealth management for WLM1 and WLM2 and a small positive impact on wealth management for WLM3 and WLM4.

The implication is that age has a small impact on wealth management but interpretation of the impact is not clear. Wealth management success does not consistently increase with education and is negative for WLM4. As expected, owning a home has a positive relationship with wealth management, indicating that the blend of investment gain, tax benefit, and mental satisfaction of homeownership is positively related to increases in wealth. Better health is negatively related to wealth management success for the head of household, but good health for the spouse is positively related to wealth management success. This may indicate that better health may reduce the precautionary motive for accumulating wealth for the household's head. More children is inconsistent with wealth management success, but other dependents have a positive association with all measures of wealth management success. The regression coefficient for the bottom wealth quartile is positive and statistically significant. This indicates that those in the lowest wealth quartile have a greater probability of increasing wealth. Self-employment is the reference for the work category. For WLM1 and WLM2, the employee status has an advantage over self-employment in terms of the probability of increasing wealth. Of course, if labor income is removed, the advantage of employee status over self-employment becomes a disadvantage, as indicated in WLM3 and WLM4. As expected, retirement and unemployment have a negative impact on wealth management compared to self-employment; the two have a positive impact on wealth management when labor income is removed.

Nevertheless, excluding differences between families in terms of gifts, inheritances and labor income may omit information that is helpful in understanding their role in wealth accumulation. Thus, table 6 reports the results of 4 GLS regression models using change in wealth as the dependent variable for measuring wealth management. All of the models include gifts and inheritances as an independent variable. Model 1 excludes both total labor income and starting wealth from the independent variables. Model 2 adds the total labor income of the family head (and spouse, if any) over the five-year period as an independent variable. Model 3 excludes labor income but includes family wealth as the start of the five-year period. Model 4 includes

both labor income and starting wealth as independent variables. Each of the regressions in Table 9 is statistically significant at the 0.01 level, and the adjusted coefficients of determination range from 0.12 to 0.18.

All of the models in Table 6 report that Black is negative and statistically significant: After controlling for the other variables, Black families do not accumulate wealth as fast as White families. This is consistent with the findings of the logistic regressions in table 5. The results of the other variables in table 6 are consistent with those in table 5. Model 4 in Table 5 seeks to identify the reasons for the lower wealth increases for the Black families by including interaction terms for receipt of inheritance, transaction account, starting wealth and labor income. The interaction term for starting wealth and labor income, for example will show if Black and White families with similar starting wealth and labor income, respectively generate similar wealth accumulation. We find that when the interaction terms are added, the negative and statistically significant black coefficient becomes positive and statistically significant. This means that the reason for the less favorable wealth increases can be related to how income is used to augment wealth, how starting wealth is used during the period to increase wealth, and the difference between black and white families in the impact of credit management (CRM2) on wealth accumulation.

VI. Participation in Financial Markets: Transaction Accounts and Non-collateralized Debt

Descriptive Statistics

For many families, deposit accounts at financial institutions are the means through which most of their large transactions occur and, correspondingly, the tools through which the family interfaces with financial markets. Table 7 compares the patterns of ownership of transaction accounts for all households and separately for Black families and White families in 1984 (when PSID started collecting these data) and 2003. The table partitions transaction accounts and non-collateralized debt by both wealth quartile and income quartile. For both wealth and income, White families use transaction accounts more than Black families in the same quartile. In

addition, the lower the economic status, the greater the difference between Black families and White families in the proportion of families holding transaction accounts. For example, at the top wealth quartile, 10% more White families hold transaction accounts, but the difference for the bottom wealth quartile is 30% (table 7). In addition, the difference between Black and White families in holding of transactions accounts declined between 1984 and 2003. Some 56% of Black families held transaction accounts in 2003 compared to 45% in 1984. The proportion of White families holding transaction accounts was stable: 86% both in 1984 and 2003.

The bottom section of Table 7 compares non-collateralized debt of Black and White families by income quartile and wealth quartile. Overall, White families held more non-collateralized debt than Black families in both 1984 and 2003, and the difference of the proportion of families holding this form of debt increased from 2.5 percent in 1984 to 4.6 percent in 2003. However, for both wealth and income, in the top 2 quartiles a higher proportion of Black families owe this form of debt than do White families. In the bottom 2 quartiles, a lower proportion of Black families borrow than do White families, and the gap is widest at the lowest wealth quartile. Further, over time these differences at the top two and bottom two wealth quartiles have increased. For example, in 1984 at the top wealth quartile 49.6 percent of Black families held non-collateralized debt compared to 36.2 percent of Black families. In the bottom wealth quartile it was 41.2 percent for Black families versus 56.6 for White families. By 2003, 61.7 percent of the top quartile Black families held non-collateralized debt versus 33.6 percent for White families. At the lowest wealth quartile, it was 41.5 percent of Black families versus 65.0 percent for White families. We will attempt to understand why the holding of these accounts are more distorted among Black families than White families, and why White families overall are able to hold more non-collateralized debt than Black families. Our analysis will start with transactions accounts. We will then analyze non-collateralized debt.

Transaction Accounts

The univariate comparisons of transaction accounts do not control for age, education, income, etc. I seek to clarify the relationships between the independent variables and transaction accounts in order to clarify the differences between Black families and White families in holding these accounts. Table 8 reports the results of the logistic regressions on the odds of holding transaction accounts and GLS regressions on the dollar amount of transaction accounts, respectively, for the Black and White families in the five points in time between 1984 and 2003.

The logistic regression of combined Black and White families shows that, even after controlling for all of the other variables, Black families are less likely to hold transaction accounts than are White families. The separate logistic regressions show that, for both Black and White families, age has a nonlinear relationship with holding transaction accounts: younger and older families are more likely to hold transactions accounts than middle age families, and more education increases the odds of holding a transaction account. Single female headed families married couples are more likely to hold transaction accounts than single males (the reference group), families with public assistance are less likely to hold transaction accounts, and greater income and greater wealth increase the odds of holding a transaction account. The unemployed are less likely to hold a transaction account than those self-employed. Owning a home and good health are positively associated with holding a checking or savings account. Notable differences between Black and White families are that for Black families, older families and retired families are less likely to hold transaction accounts, while neither relationship is true for White families.

Table 8 also includes GLS regressions of the dollars held in transaction accounts for those families that have such accounts. The combined regression results show that Black families hold $2,954 less than White families after controlling for the impact of the other variables. A major difference between the Black and White families in the GLS coefficients is that for White families the amount held in transaction accounts increases with education, but education does not positively affect the size of Black families' transaction accounts. Black retirees hold less in their

transactions accounts than the Black self-employed, while White retirees hold more than the White self-employed.

Non-collateralized Debt

This study has observed the credit management experience of Black and White families between 1991 and 1996, and found that Black families are more successful in credit management as it relates to the frequency at which creditors must take actions to collect, and to frequency of bankruptcy. How do these findings match with the amount of non-collateralized debt owed by Black and White families? To what extent does the amount of non-collateralized debt provided to Black families reflect their favorable credit management?

Table 9 reports the logistic and OLS regressions that predict whether the family owes non-collateralized debt and the dollar amount of this debt, respectively. The logistic regression shows that Black families are less likely to hold non-collateralized debt than White families after controlling for the other variables. The results also show that holding a transaction account is positively related to holding non-collateralized debt. In addition, non-collateralized debt has a nonlinear relationship with age: as age increases, the odds of hold non-collateralized debt declines, but older age has lower odds than middle age of holding non-collateralized debt. The odds of owing non-collateralized debt increases with education. Married couples and single females are more likely to owe this form of debt than single males. The use of non-collateralized debt is negatively related to public assistance status and the number of children. Homeownership is positively associated with having non-collateralized debt. Real income is positively associated with owing non-collateralized debt, but wealth is negatively associated. The individual race logistic regressions show that families of the Black self-employed owe less non-collateralized debt than Black families in the other categories; the reverse is true for White self-employed workers.

Table 9 also reports the results of regressions predicting the dollar amount of non-collateralized debt families owed. The GLS regressions show that among families owing non-

collateralized debt, Black families hold $2,204 less than do White families when controlling for the impact of the other independent variables. In addition, the amount of non-collateralized debt is positively associated with holding a transaction account. Age and education are positively related to the amount of non-collateralized debt for both Black and White families. Marriage and homeownership are positively related to families' amount of non-collateralized debt. Real income is positively related to debt, but wealth is negatively related to the amount of debt. Although the self-employed borrow more than the other work categories for White families, this relationship does not hold for Black families.

VII. Conclusions and Discussion

This study uses PSID data covering 1984 through 2003 to examine various aspects of the financial management of families. First, the greater reluctance of Black families to use checking and savings accounts than White families is only partially explained by regression models that consider a wide array of demographic variables. For many families, transaction accounts are the tools through which they begin to successfully interface with financial markets. Thus, related topics for future research include: What are the impediments for Black families to hold transaction accounts at financial institutions, and to what extent are there impediments to other minorities? Second, the credit management success of Black families is equal to or greater than that of White families, based on three measures. Black families, however, owe less credit card and other non-collateralized debt than White families, implying either that Black families have a lower demand for such debt or that lenders are biased against them. The extent of bias against Black borrowers is an ongoing area of research, and the results here show that the issue is relevant when comparing the credit card and other non-collateralized debt of Black and White families. Third, wealth increases faster among White families than among Black families even if we adjust for demographics and differences in labor income, and gifts and inheritances. As least part of the disparity in wealth management can be related to how Black families and White families us starting wealth, labor income and credit management to achieve wealth increases.

Thus the savings and wealth portfolio management of Black families and similarly situated White families should be analyzed to flesh out differences that lead to differences in wealth changes.

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TABLE 1: Descriptive Statistics for PSID Families, 1984 and 2003

		All White Families	All Black Families	White Married Couples	Black Married Couples	White Single Males	Black Single Males	White Single Females	Black Single Females
% of Families	1984	100.0	100.0	58.1	34.2	14.0	15.0	27.8	50.8
	2003	100.0	100.0	52.8	22.2	19.8	26.6	27.4	51.1
Mean Age of Head (Years	1984	46.8	42.6	46.3	46.7	39.5	37.0	51.7	41.6
	2003	49.7	46.2	50.2	49.7	43.1	40.4	53.5	47.7
Head % Ed > High Sch	1984	38.0	19.3	39.8	18.9	45.7	22.6	30.1	18.7
	2003	53.2	33.6	56.7	36.6	53.0	35.6	46.4	31.2
Number of Children	1984	0.7	1.0	1.0	1.2	0.1	0.2	0.4	1.1
	2003	0.6	0.7	0.8	0.9	0.2	0.2	0.3	0.9
Work Status, Head (%):									
Retired	1984	19.3	18.0	17.8	24.8	17.7	17.1	23.4	13.7
	2003	21.8	21.0	19.8	24.0	15.6	17.4	30.1	21.5
Worker	1984	60.2	55.6	64.5	64.5	67.0	60.8	47.7	48.1
	2003	60.9	59.9	63.5	63.6	64.5	64.1	53.3	56.0
Self employed	1984	10.6	2.2	14.2	4.5	8.9	1.8	4.0	0.8
	2003	11.1	4.3	14.1	6.1	11.9	4.4	4.6	3.5
Unemployed	1984	9.8	24.2	3.5	6.2	6.4	20.3	24.8	37.4
	2003	6.2	14.9	2.6	6.3	7.9	14.1	12.0	19.0
Head Health Fair or Poor	1984	14.6	30.0	14.6	30.0	13.8	29.5	26.6	34.1
	2003	15.1	25.2	12.0	22.3	15.1	18.8	21.1	29.8
Spouse Health Fair or Poor	1984	14.2	28.6	14.2	28.6				
	2003	12.2	18.9	12.2	18.9				
Own home (%)	1984	63.4	38.3	79.6	64.4	35.2	14.2	43.7	27.9
	2003	69.6	40.7	86.5	72.0	47.0	29.8	53.3	32.7
Recv'd Pub. Assist. % of Group	1984	4.8	23.5	2.1	10.4	3.9	9.2	11.0	36.6
	2003	2.8	11.8	1.3	4.3	2.6	8.6	5.9	16.7
Median Family Wealth ($000)	1984	38.5	2.4	63.0	18.0	9.0	0.5	15.8	0.3
	2003	89.0	8.5	150.0	46.6	27.5	4.5	39.0	4.0
Black/White Wealth Ratio	1984		16.0		3.5		18.0		52.7
	2003		10.5		3.2		6.1		9.8

	Top:Quartile 1		Quartile 2		Quartile 3		Bottom:Quartile 4	
	Black	White	Black	White	Black	White	Black	White
Family Wealth								
% of Families in this group 1984	4.0	28.2	16.0	26.7	25.7	24.3	54.3	20.7
% of Families in this group 2003	4.9	27.9	14.8	26.6	31.0	24.1	49.3	21.4
Family Income								
% of Families in this group 1984	7.3	25.2	16.0	24.8	23.3	25.1	53.4	24.9
% of Families in this group 2003	9.1	27.4	19.2	25.8	28.6	24.3	43.0	22.3

Source: Author's calculations based on data from the PSID. Proportions may not add to 1.0 because of rounding.

TABLE 2
Summary Statistics on Credit Management, Wealth Management and Labor Income, 1989-94 and 1994-99
By Family Category

		All Black Families	All White Families	Black Married Couples	White Married Couples	Black Single Males	White Single Males	Black Single Females	White Single Females
Number of families		2,804	5,658	1,099	4,039	508	786	1,197	833
A. Credit Management % Success Combined 1989-94 and 1994-99									
CRM1: No trouble paying bills and none of the below.		76.0	88.1	78.4	89.3	78.9	84.7	72.4	85.4
CRM2: CRM1 + Trouble paying bills, but none of the below.		88.5	92.9	88.9	93.5	90.9	90.8	87.1	92.2
CRM3: CRM2 + Creditors called, but none of the below.		97.6	97.7	97.3	97.8	99.0	96.7	97.3	97.8
CRM4: CRM3 + Liens or repossessions, but no bankruptcy.		98.1	98.3	97.8	98.4	99.4	97.7	97.9	98.7
B. Wealth Management % Success Combined 1989-94 and 1994-99									
WLM1: $W_e > W_s$		53.4	68.1	60.4	70.2	53.3	66.7	47.0	59.3
WLM2: $W_e > W_s + G$		53.2	66.9	60.2	69.1	53.1	66.2	46.7	57.1
WLM3: $W_e > W_s + L$		10.6	15.4	6.5	14.1	10.2	12.1	14.6	24.7
WLM4: $W_e > W_s + G + L$		10.4	14.7	6.3	13.5	10.0	11.7	14.4	23.4
C. Other Statistics									
% Received Gift/Inheritance	1984-89	1.1	7.2	1.4	8.2	1.0	4.9	0.8	4.3
	1994-99	1.9	10.4	2.7	11.2	1.4	9.3	1.2	7.4
Mean Labor Income (000)	1989-94	99.4	199.5	167.6	232.0	87.4	161.6	42.0	68.2
	1994-99	126.0	237.5	210.3	282.5	102.9	171.1	57.8	93.9
Mean Change in Wealth (000)	1989-94	13.3	57.4	19.1	63.0	11.3	37.0	8.9	48.6
	1994-99	22.1	108.6	52.3	123.6	4.3	112.5	1.2	37.5

W_e = ending wealth W_s = starting wealth G = gifts and inheritances L = labor income

SOURCE: PSID core and supplemental wealth files and the author's calculations.

Table 3: Results of the Logistic Regressions

Credit Management, 1989-94 and 1994-99

Dependent Variable:	CRM1		CRM2		CRM3		CRM4	
Independent Variables:	Coeff	**z**	Coeff	**z**	Coeff	**z**	Coeff	**z**
Black	-0.2236	-1.7 *	0.0339	0.2	0.6664	2.4 **	0.5505	1.9 *
35 ≤ Age < 55	0.1655	1.6	0.1426	1.1	0.2202	1.0	0.1171	0.5
55 ≤ Age ≤ 75	1.3603	6.3 ***	1.8306	5.6 ***	1.1307	2.2 **	0.6125	1.1
Ed head= High School, no Coll.	0.1009	0.8	-0.1330	-0.8	-0.5409	-2.0 **	-0.5700	-1.8 *
Ed head= College, no degree	-0.0399	-0.3	-0.2597	-1.4	-0.2830	-0.9	-0.3386	-0.9
Ed head= College degree	0.1039	0.6	0.0677	0.3	0.0047	0.0	0.8724	1.3
Ed wife= High School, no Coll.	0.0295	0.2	-0.1017	-0.5	-0.0435	-0.1	-0.2670	-0.6
Ed wife= College, no degree	0.0989	0.5	0.0429	0.2	0.2376	0.6	-0.2063	-0.4
Ed wife= College degree	-0.0130	-0.1	0.0863	0.3	0.8739	1.4	0.8983	0.9
Married	-0.8332	-3.5 ***	-0.7389	-2.5 **	-0.8886	-1.6	-0.2734	-0.4
Single Female	-0.0809	-0.5	-0.0496	-0.3	-0.0645	-0.2	0.0594	0.2
Number of Children	-0.1910	-4.9 ***	-0.2373	-5.1 ***	-0.0996	-1.2	-0.1537	-1.7 *
Number of Outside Dependents	-0.0153	-0.2	-0.0071	-0.1	-0.1056	-1.0	-0.0573	-0.5
Receives Public Assistance	0.2066	1.0	0.2381	0.9	0.2191	0.4	0.4140	0.6
Health Excellent Or Good, Head	0.3823	2.2 **	0.5084	2.2 **	0.6620	1.7 *	0.9095	1.7 *
Health Excellent Or Good, Wife	0.7017	3.6 ***	0.7205	2.9 ***	0.3724	0.8	0.1303	0.2
Own Home-no mortgage	0.5586	3.1 ***	0.6594	2.6 **	0.8965	1.8 *	0.5676	0.9
Own Home-only 1st mortgage	0.1915	1.5	0.2643	1.5	-0.0416	-0.2	-0.0599	-0.2
Own Home-1st and 2nd mortgage	-0.4249	-2.1 **	-0.4329	-1.9 *	-0.3830	-0.9	-0.1340	-0.2
Wealth/10,000	0.0276	2.8 ***	0.0319	1.8 *	0.0689	2.7 ***	0.1400	2.9 ***
Labor Income/10,000	0.0413	6.2 ***	0.0367	4.8 ***	0.0453	3.1 ***	0.0305	1.7 *
Retired	1.2105	4.6 ***	0.8879	2.4 **	1.9439	3.7 ***	1.4958	2.2 **
Worker	0.4489	3.0 ***	0.2756	1.4	0.5633	1.8 *	0.1814	0.4
Unemployed	0.6702	3.0 ***	0.8786	2.9 ***	1.4165	2.4 **	1.4443	2.1 **
5,000 < Home exemption ≤ 10,000	-0.1683	-0.9	0.0916	0.4	-0.0314	-0.1	0.3070	0.6
10,000 < Home exemption ≤ 30,000	-0.0934	-0.6	-0.0152	-0.1	0.0929	0.3	0.1574	0.4
Home exemption > 30,000	0.0471	0.3	0.3711	1.7 *	0.5095	1.5	0.4282	1.1
Unlimited Home exemption	-0.0992	-0.5	0.0704	0.3	-0.2925	-0.8	-0.5386	-1.2
Garnishment	-1.5224	-3.7 ***	-1.4571	-3.2 ***	-2.4569	-4.8 ***	-2.2624	-4.2 ***
Judicial Foreclosure	-0.0632	-0.5	-0.2598	-1.6 *	-0.7160	-2.6 **	-0.7588	-2.4 **
State bankruptcy rate	-0.1527	-0.8	-0.1741	-0.7	-0.4916	-1.2	-1.1474	-2.6 **
State unemployment rate	0.0145	0.3	0.0094	0.1	0.2380	1.8 *	0.3725	2.7 ***
Received gift/inheritance	0.0870	0.4	0.0527	0.2	-0.0235	-0.1	2.0753	1.4
Divorced during period	-0.1414	-0.9	-0.1537	-0.8	-0.3132	-1.0	-0.4056	-1.1
Intercept	0.2379	0.5	1.1613	1.7 *	2.3374	1.9 *	2.4715	1.9 *
Year and Region Fixed Effects	Yes		Yes		Yes		Yes	
Wald Chi Square	432 ***		337 ***		337 ***		-477 ***	
Pseudo R^2	0.154		0.155		0.171		0.214	

N = 8,462

*p < .10. **p < .05. ***p < .01.

SOURCE: PSID Data and the Author's calculations.

TABLE 4

Relationships Between Credit Management Outcomes and Holding Transactions Accounts and Noncollateralized Debt. Outcomes of Logistic Regressions.

A. Credit Management Outcomes and Holding Transactions Accounts

Regression		1	2		3	4	5	6
		Combined Families Regression Without Tr Acct Indicator	Regressions with NC Debt Indicator				Regressions Without Tr Acct Indicator	
			Combined Families		Black Families Only	White Families Only	Families Holding Tr Acct	Families Without Tr Acct
Dependent Variable:		Black Family Indicator (Table 5)	Black Family Indicator	Tr Acct Indicator	Tr Acct Indicator	Tr Acct Indicator	Black Family Indicator	Black Family Indicator
CRM1	Coeff.	-0.2127*	-0.1599	0.2859**	0.3104	0.2803**	-0.3653**Q	0.1007
CRM2	Coeff.	0.0498	0.1021	0.2866*	0.4226*	0.2367	-0.0973	0.1951
CRM3	Coeff.	0.6917**	0.7505***	0.3459	0.9981**	0.2842	0.7792*	0.2632
CRM4	Coeff.	0.5846***	0.6374***	0.3849	0.9576*	0.3628	0.4380	0.4737

B. Credit Management Outcomes and Holding Noncollateralized (NC) Debt

Regression		1	2		3	4	5	6
		Combined Families Regression Without NC Debt Indicator	Regressions with NC Debt Indicator				Regressions Without NC Debt Indicator	
			Combined Families		Black Families Only	White Families Only	Families Holding NC Debt	Families Without NC Debt
Dependent Variable:		Black Family Indicator (Table 5)	Black Family Indicator	NC Debt Indicator	NC Debt Indicator	NC Debt Indicator	Black Family Indicator	Black Family Indicator
CRM1	Coeff.	-0.2127*	-0.3430***	-1.5511***	-0.5730***	-1.1816***	-0.2611*	-0.4993**
CRM2	Coeff.	0.0498	-0.1178	-1.2741***	-1.3075***	-1.2590***	-0.221498	0.2086
CRM3	Coeff.	0.6917**	0.5737**	-0.8807***	-0.3168	-0.9871***	0.7575**	0.1646
CRM4	Coeff.	0.5846**	0.4563	-1.1148***	-0.1467	-1.2312***	0.6409*	-0.0765

These results report the specified regression coefficients for logistic regressions of the model reported in table 5, after adding indicator variables of holding a transaction account or non-collateralized debt as a regressor (models 2 through 5); separating the families into Black and White families (3 and 4); or separating the families into those who hold the item and those that do not (4 and 5).

TABLE 5: Results of Logistic Regressions

Measures of Wealth Changes

Dependent Variable:	WLM1		WLM2		WLM3		WLM4	
	Coeff.	z	Coeff.	z	Coeff.	z	Coeff.	z
Independent Variables:								
Black	-0.3326	-3.3 ***	-0.2579	-2.5 **	-0.4495	-2.8 ***	-0.4193	-2.5 **
CRM1-Yes	0.3273	3.4 ***	0.3111	3.3 ***	0.2904	1.8 *	0.2872	1.8 *
Transaction Account-Yes	-0.0329	-0.3	-0.0268	-0.3	-0.1930	-1.3	-0.1977	-1.3
35 ≤ Age < 55	-0.1115	-1.4	-0.1451	-1.9 *	0.7087	5.0 ***	0.6846	4.7 ***
55 ≤ Age ≤ 75	-0.1470	-1.3	-0.2009	-1.8 *	1.6311	9.6 ***	1.5458	8.9 ***
Educ head= High School, no Coll.	0.1863	2.0 **	0.1680	1.9 *	0.2637	1.9 *	0.2498	1.8 *
Educ head= College, no degree	0.3447	3.3 ***	0.2932	2.8 ***	0.6096	3.9 ***	0.5828	3.7 ***
Educ head= College degree	0.5167	4.6 ***	0.4951	4.4 ***	0.4127	2.5 **	0.3679	2.2 **
Educ wife= High School, no Coll.	-0.0923	-0.8	-0.1059	-0.9	-0.1393	-0.9	-0.1783	-1.1
Educ wife= College, no degree	-0.2064	-1.6	-0.2235	-1.8 *	-0.3361	-1.8 *	-0.4430	-2.3 **
Educ wife= College degree	-0.0894	-0.6	-0.1249	-0.9	-0.1118	-0.6	-0.1749	-0.9
Married	0.1448	0.8	0.1541	0.9	0.1328	0.6	0.1188	0.5
Single Female	-0.2215	-2.0 **	-0.2941	-2.7 ***	0.1032	0.6	0.0344	0.2
Number of Children	-0.0936	-3.0 ***	-0.0835	-2.7 ***	-0.0569	-1.1	-0.0336	-0.6
Number of Outside Dependents	-0.0019	0.0	-0.0121	-0.3	-0.0833	-1.0	-0.0882	-1.1
Public Assistance	-0.0988	-0.6	-0.1068	-0.7	0.2128	0.9	0.2103	0.9
Health Excellent Or Good, Head	0.2829	2.2 **	0.3000	2.3 **	0.1476	0.9	0.2035	1.2
Health Excellent Or Good, Wife	0.1630	1.1	0.1326	0.9	-0.0283	-0.2	-0.0144	-0.1
Own Home-no mortgage	0.1553	1.4	0.1464	1.3	0.5919	3.6 ***	0.5889	3.5 ***
Own Home-only 1st mortgage	0.4902	5.3 ***	0.4924	5.3 ***	0.3126	2.0 **	0.2987	1.9 *
Own Home-1st and 2nd mortgage	0.3984	2.6 ***	0.4094	2.7 ***	0.3474	1.4	0.2956	1.2
Retired	0.0197	0.1	0.0647	0.5	0.3131	2.1 **	0.3847	2.6 ***
Worker	0.1780	1.8 *	0.1913	2.0 **	-1.3465	-10.8 ***	-1.3613	-10.7 ***
Unemployed	-0.1721	-1.1	-0.1250	-0.8	-0.1554	-0.8	-0.1219	-0.6
5,000 < Home exemption ≤ 10,000	0.3362	2.7 ***	0.3045	2.4 **	0.1623	1.0	0.1785	1.0
10,000 < Home exemption ≤ 30,000	-0.0681	-0.6	-0.0572	-0.5	0.0742	0.5	0.1415	0.9
Home exemption > 30,000	0.0367	0.3	0.0786	0.6	0.1015	0.6	0.1452	0.8
Unlimited Home Exemption	0.1296	1.0	0.1822	1.4	0.2338	1.2	0.2629	1.3
Garnishment	-0.4185	-1.2	-0.2957	-0.9	-0.8036	-1.2	-0.5989	-0.9
Judicial Foreclosure	-0.0988	-1.1	-0.1174	-1.3	-0.0053	0.0	-0.0018	0.0
State Personal Bankruptcy Rate	-0.0391	-0.3	0.0012	0.0	-0.1549	-0.8	-0.0887	-0.4
State Unemployment Rate	-0.0562	-1.5	-0.0741	-1.9 *	-0.0967	-1.7 *	-0.1134	-1.9 *
Divorced During Period	-0.3259	-2.6 ***	-0.3000	-2.4 **	0.2049	1.1	0.2226	1.2
Period=1989-1994	-0.0916	-0.9	-0.0554	-0.6	-0.1915	-1.2	-0.1541	-0.9
Lowest Income Quartile-start	-0.2950	-3.0 ***	-0.2904	-2.9 ***	0.3375	2.5 **	0.3193	2.4 **
Lowest Wealth Quartile-start	0.7878	7.6 ***	0.7851	7.6 ***	0.3418	2.1 **	0.3593	2.2 **
Intercept	-0.3537	-1.0	-0.3220	-0.9	-2.3380	-4.4	-2.4468	-4.5 ***
Wald Chi-Square	**316.5**	***	**314.9**	***	**807.2**	***	**785.4**	***
Pseudo R^2	**0.053**		**0.052**		**0.224**		**0.222**	

N = 8,462

***p* < .10. ****p** < .05. *****p** < .01.

SOURCE: PSID Data and the Author's calculations.

TABLE 6: GLS Wealth Regressions, 1989-94 and 1994-99

Dependent Variable: Change in Wealth (Dollars)
GLS Random Effects Clustered by Family

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coeff.	t-value	Coeff.	t-value	Coeff.	t-value	Coeff.	t-value	Coeff.	t-value
Independent Variables:										
Black	-15,871	-4.4 ***	-13,792	-3.9 ***	-13,304	-3.8 ***	-12,053	-3.5 ***	22,104	2.8 ***
CRM1-Yes	19,768	5.3 ***	12,594	3.5 ***	16,893	4.6 ***	11,241	3.1 ***	17,164	3.5 ***
Transaction Account-Yes	1,602	0.4	-4,513	-1.3	-898	-0.3	-5,705	-1.6	539	0.1
Received gift/inheritance	58,310	10.4 ***	54,135	9.9 ***	53,960	9.8 ***	51,268	9.5 ***	48,947	8.7 ***
Labor Income/10,000			2,324	21.4 ***			2,040	18.5 ***	2,082	18.7 ***
Starting Wealth/10,000					1,372	16.6 ***	1,065	12.9 ***	1,086	13.2 ***
Black X CRM1									-12,445	-1.8 *
Black X Transaction Account									-1,040	-0.2
Black X Received Gift/Inheritance									9,581	0.5
Black X Starting Wealth/1000									-618	-2.5 **
Black X Labor Income/10,000									-3,965	-8.2 ***
35 ≤ Age < 55	7,033	2.2 **	1,917	0.6	2,415	0.8	-1,043	-0.3	-27	0.0
55 ≤ Age ≤ 75	11,708	2.4 **	20,686	4.3 ***	-1,055	-0.2	9,675	2.0 **	11,019	2.3 **
Educ head= High School, no Coll.	3,891	1.0	3,335	0.9	1,394	0.4	1,463	0.4	2,042	0.6
Educ head= College, no degree	14,483	3.3 ***	8,862	2.1 **	10,333	2.4 **	6,327	1.5	7,370	1.8 *
Educ head= College degree	32,289	6.7 ***	14,818	3.1 ***	23,237	4.8 ***	9,928	2.1 **	9,968	2.1 **
Educ wife= High School, no Coll.	4,517	1.0	-1,036	-0.2	2,688	0.6	-1,776	-0.4	-1,121	-0.3
Educ wife= College, no degree	14,886	2.8 ***	3,423	0.7	11,825	2.2 **	2,449	0.5	3,678	0.7
Educ wife= College degree	47,036	7.7 ***	14,968	2.5 **	37,361	6.2 ***	11,383	1.9 *	13,115	2.2 **
Married	6,673	0.9	3,256	0.5	5,057	0.7	2,420	0.3	4,250	0.6
Single Female	1,743	0.4	9,063	2.0 **	3,157	0.7	9,264	2.1 **	6,483	1.5
Number of Children	-3,761	-3.0 ***	-4,358	-3.6 ***	-3,316	-2.7 ***	-3,939	-3.3 ***	-3,981	-3.3 ***
Number of Outside Dependents	1,798	1.0	-23	0.0	870	0.5	-521	-0.3	306	0.2
Public Assistance	5,789	1.0	7,468	1.3	4,328	0.8	6,128	1.1	2,592	0.5
Health Excellent Or Good, Head	14,153	2.6 ***	9,079	1.7 *	10,725	2.0 **	7,038	1.3	7,571	1.5
Health Excellent Or Good, Wife	3,279	0.5	933	0.2	3,619	0.6	1,484	0.3	263	0.0
Own Home-no mortgage	6,048	1.4	6,874	1.6	-5,978	-1.4	-2,566	-0.6	2,798	0.6
Own Home-only 1st mortgage	7,958	2.3 **	-1,270	-0.4	1,555	0.5	-5,111	-1.5	-1,213	-0.4
Own Home-1st and 2nd mortgage	9,969	1.5	-7,267	-1.1	4,721	0.7	-9,231	-1.5	-5,051	-0.8
Retired	-35,174	-5.5 ***	-21,274	-3.4 ***	-21,436	-3.4 ***	-12,309	-2.0 **	-15,218	-2.5 **
Worker	-35,162	-7.7 ***	-45,001	-10.0 ***	-20,270	-4.4 ***	-32,231	-7.1 ***	-32,724	-7.2 ***
Unemployed	-38,016	-5.6 ***	-34,470	-5.2 ***	-26,736	-4.0 ***	-26,145	-4.0 ***	-29,756	-4.6 ***
Divorced During Period	-11,195	-2.1 **	-4,576	-0.9	-9,989	-1.9 *	-4,450	-0.9	-4,835	-1.0
Period=1989-1994	-4,847	-1.2	1,254	0.3	-2,772	-0.7	2,118	0.5	610	0.2
5,000 < Home exemption ≤ 10,000	721	0.1	2,678	0.5	2,155	0.4	3,552	0.7	3,037	0.6
10,000 < Home exemption ≤ 30,000	-7,142	-1.5	-5,933	-1.3	-6,333	-1.3	-5,454	-1.2	-5,218	-1.1
Home exemption > 30,000	-2,893	-0.6	-2,362	-0.5	-2,385	-0.5	-2,033	-0.4	-734	-0.2
Unlimited Home exemption	2,307	0.4	2,473	0.5	1,064	0.2	1,487	0.3	1,956	0.4
Garnishment	-12,720	-0.9	-12,495	-1.0	-13,864	-1.1	-13,411	-1.0	-16,123	-1.3
Judicial Foreclosure	-3,184	-0.9	-2,354	-0.7	-3,517	-1.0	-2,714	-0.8	-2,360	-0.7
State Personal Bankruptcy rate	819,703	1.4	416,358	0.7	596,651	1.0	292,554	0.5	350,462	0.6
State unemployment rate	-1,740	-1.1	-2,720	-1.7 *	-2,719	-1.7 *	-3,361	-2.1 *	-3,417	-2.2 **
Intercept	16,352	1.1	14,669	1.0	17,214	1.2	15,545	1.1	-944	-0.1
N	**8,169**		**8,169**		**8,169**		**8,169**		**8,169**	
R-squared	**0.119**		**0.166**		**0.148**		**0.183**		**0.193**	

***p < .10. **p < .05. ***p < .01.**

SOURCE: PSID core and supplemental wealth files and the author's calculations.

TABLE 7
Percentage of Families Holding Transaction Accounts and Noncollateralized Debt by Wealth Quartile and Income Quartile

	Top Quartile 1		Quartile 2		Quartile 3		Bottom Quartile 4		All Families	
	Black	White	Black	White	Black	White	Black	White	Black	White
By Family Wealth:										
% of families in this group with transaction accounts 1984	81.2	97.3	61.0	91.6	58.5	87.2	30.3	62.5	44.5	86.1
% of families in this group with transaction accounts 2003	95.0	96.3	77.8	91.6	64.0	83.6	41.4	68.0	56.4	85.9
% of Families in this group with noncollateralized debt 1984	49.6	36.2	48.7	47.4	46.3	49.0	41.2	56.6	44.0	46.5
% of Families in this group with noncollateralized debt 2003	61.7	33.6	54.7	48.1	46.6	59.9	41.5	65.0	46.0	50.6
By Family Income:										
% of families in this group with transaction accounts 1984	89.7	96.7	74.6	91.1	54.0	86.1	25.2	70.2	44.5	86.1
% of families in this group with transaction accounts 2003	86.6	96.2	81.2	90.6	64.1	83.7	33.8	70.4	56.4	85.9
% of Families in this group with noncollateralized debt 1984	61.9	53.3	57.4	54.5	47.3	43.6	36.2	34.8	44.0	46.5
% of Families in this group with noncollateralized debt 2003	69.5	53.4	67.8	56.4	49.8	51.6	28.8	39.4	46.0	50.6

Source: PSID data and author's calculations

TABLE 8
Regression Models Explaining the Holding of Transaction Accounts at Financial Institutions
1984,1989,1994,1999 and 2003

1. Logistic regressions of whether family holds a transaction account

	Combined Families		Black Families		White Families	
Independent Variables	Coefficient	**z**	Coefficient	**z**	Coefficient	**z**
Intercept	-0.2086	-1.6	-1.3932	-6.6 ***	-0.1758	-1.0
Black	-1.1310	-34.0 ***				
35 ≤ Age < 55	-0.1706	-4.7 ***	-0.2574	-5.0 ***	-0.1107	-2.1 **
55 ≤ Age ≤ 75	0.0227	0.4	-0.1906	-2.2 **	0.1274	1.5
Education= High School, no Coll.	0.5924	15.7 ***	0.4114	7.5 ***	0.7078	13.3 ***
Education= College, no degree	1.0738	22.6 ***	0.9019	13.7 ***	1.1862	17.4 ***
Education= College degree	1.2601	21.9 ***	1.1722	12.8 ***	1.3346	17.9 ***
Married	0.0631	0.8	0.0145	0.1	0.1018	1.0
Single Female	0.3573	7.8 ***	0.3413	5.1 ***	0.4214	6.6 ***
Number of Children	-0.1654	-11.8 ***	-0.1486	-7.9 ***	-0.1889	-9.0 ***
Number of Outside Dependents	0.0383	0.7	0.0914	1.1	-0.0094	-0.5
Public Assistance	-0.6907	-12.2 ***	-0.4782	-6.3 ***	-0.9288	-10.6 ***
Health Excellent Or Good, Head	0.2690	6.0 ***	0.1522	2.4 **	0.3925	6.1 ***
Health Excellent Or Good, Wife	0.3546	4.9 ***	0.3816	3.4 ***	0.3306	3.3 ***
Own Home	0.5427	12.1 ***	0.3687	4.6 ***	0.6711	11.1 ***
Real Income/$10,000	0.2048	12.9 ***	0.2915	14.4 ***	0.1412	6.7 ***
Real Wealth/$10,000	0.0165	3.3 ***	0.0355	2.1 **	0.0119	2.6 **
Retired	0.0851	1.1	-0.0305	-0.2	0.2043	1.9 *
Worker	0.0832	1.2	0.0406	0.3	0.0846	1.0
Unemployed	-0.7186	-9.4 ***	-0.9110	-6.9 ***	-0.5691	-5.7 ***
Year=1989	-0.1171	-2.5 **	-0.1592	-2.3 **	-0.0364	-0.5
Year=1994	-0.4003	-8.5 ***	-0.4036	-5.7 ***	-0.3992	-5.9 ***
Year=1999	0.0642	1.1	0.1042	1.2	0.0248	0.3
Year=2003	-0.2058	-3.8 ***	-0.1432	-1.8 *	-0.2648	-3.6 ***
5,000 < Home exemption ≤ 10,000	0.0094	0.2	0.0066	0.1	0.0797	1.1
10,000 < Home exemption ≤ 30,000	-0.1581	-3.0 ***	-0.2106	-2.7 ***	0.0070	0.1
Home exemption > 30,000	-0.1064	-1.7 *	0.0383	0.4	-0.0850	-1.0
Unlimited Home exemption	0.2657	4.1 ***	0.3261	3.1 ***	0.2015	2.3 **
Garnishment	0.2369	1.3	0.2429	1.0	0.0618	0.2
Judicial Foreclosure	0.0347	0.9	0.0748	1.3	-0.0137	-0.2
Minus 2 Log L	149,989 ***		38,301 ***		110,072 ***	
Pseudo R^2	0.317		0.236		0.196	
N	33,923		21,751		12,172	

TABLE 8 (Con.)

2. GLS regressions of the dollar amount of transaction accounts
GLS Random Effects Clustered by Family

	Combined Families		Black Families		White Families	
Independent Variables	Coefficient	z	Coefficient	z	Coefficient	z
Intercept	-9,570	-2.9 ***	554	0.1	-14,106	-3.4 ***
Black	-2,594	-2.7 ***				
35 ≤ Age < 55	2,910	3.2 ***	2,513	2.3 **	3,190	2.8 ***
55 ≤ Age ≤ 75	13,571	10.0 ***	4,272	2.3 **	14,930	9.0 ***
Education= High School, no Coll.	2,720	2.3 **	259	0.2	2,497	1.7 *
Education= College, no degree	3,755	3.0 ***	1,664	1.1	3,588	2.2 **
Education= College degree	8,236	6.6 ***	17	0.0	9,426	6.1 ***
Married	4,746	2.3 **	4,191	1.7 *	5,682	2.2 **
Single Female	582	0.5	-402	-0.3	598	0.4
Number of Children	-1,233	-3.3 ***	-130	-0.3	-1,764	-3.6 ***
Number of Outside Dependents	523	2.3 **	1,260	4.4 ***	286	1.0
Public Assistance	-4,617	-2.0 **	-222	-0.1	-7,762	-2.2 **
Health Excellent Or Good, Head	4,367	3.3 ***	1,457	1.0	4,432	2.6 ***
Health Excellent Or Good, Wife	-2,912	-1.5	-3,470	-1.5	-3,393	-1.4
Own Home	562	0.6	-1,251	-1.2	1,651	1.4
Real Income/$10,000	1,449	22.4 ***	909	4.5 ***	1,462	20.3 ***
Real Wealth/$10,000	174	30.5 ***	151	10.9 ***	172	26.7 ***
Retired	11,928	6.7 ***	-3,503	-1.3	14,955	7.1 ***
Worker	-3,286	-2.7 ***	-2,962	-1.4	-3,642	-2.6 **
Unemployed	3,281	1.6	-2,239	-0.8	4,415	1.7 *
Year=1984	3,101	2.5 **	689	0.5	4,008	2.6 ***
Year=1994	6,674	5.4 ***	5,668	3.6 ***	7,088	4.6 ***
Year=1999	1,466	1.1	1,879	1.1	1,020	0.6
Year=2003	3,516	2.7 ***	5,252	3.2 ***	3,239	2.0 **
5,000 < Home exemption ≤ 10,000	161	0.1	-381	-0.3	853	0.5
10,000 < Home exemption ≤ 30,000	-2,023	-1.4	-1,412	-0.8	-1,456	-0.8
Home exemption > 30,000	-1,213	-0.8	-2,104	-1.0	-244	-0.1
Unlimited Home exemption	1,107	0.7	-97	0.0	903	0.5
Garnishment	4,820	0.9	-5,834	-1.1	12,551	1.8 *
Judicial Foreclosure	-1,425	-1.4	-1,678	-1.3	-915	-0.7
F-value		24.3 ***		18.9 ***		16.4 ***
R^2	0.13		0.05		0.14	
N	24,007		18,461		5,546	

*p < .10. **p < .05. ***p < .01.
SOURCE: PSID data and the author's calculations.

TABLE 9
Regression Models Explaining the Family Holding of Non-collateralized Debt
1984,1989,1994, 1999 and 2003

1. Logistic regressions of whether the family owes non-collateralized debt

	Combined Families		Black Families		White Families	
Independent Variables	Coefficient	**z**	Coefficient	**z**	Coefficient	**z**
Black	-0.1842	-5.6 ***				
Holds transaction account	1.0330	29.0 ***	1.1492	21.1 ***	0.7952	15.9 ***
35 ≤ Age < 55	-0.1757	-5.4 ***	-0.1641	-2.8 ***	-0.2019	-5.0 ***
55 ≤ Age ≤ 75	-0.5459	-11.2 ***	-0.3476	-3.8 ***	-0.6241	-10.3 ***
Education= High School, no Coll.	0.1967	5.3 ***	0.1382	2.3 **	0.2936	6.1 ***
Education= College, no degree	0.6362	14.8 ***	0.5579	7.6 ***	0.7177	13.0 ***
Education= College degree	0.6042	13.2 ***	0.7643	8.1 ***	0.6352	11.5 ***
Married	0.5102	7.1 ***	0.6605	5.3 ***	0.3874	4.2 ***
Single Female	0.2345	5.5 ***	0.4900	6.6 ***	0.1449	2.6 **
Number of Children	0.0001	0.1	-0.0456	-2.2 **	0.0356	2.1 **
Number of Outside Dependents	0.0344	2.3 **	0.0357	0.6	0.0319	0.8
Public Assistance	-0.4871	-7.6 ***	-0.2919	-3.4 ***	-0.6605	-6.5 ***
Health Excellent Or Good, Head	-0.1335	-3.1 ***	-0.0337	-0.5	-0.1630	-2.8 ***
Health Excellent Or Good, Wife	-0.2327	-3.5 ***	-0.3056	-2.7 ***	-0.1699	-2.0 **
Own Home	0.7472	22.3 ***	0.8650	14.8 ***	0.5765	13.4 ***
Real Income/$10,000	0.0646	12.1 ***	0.1477	9.6 ***	0.0430	4.9 ***
Real Wealth/$10,000	-0.0460	-23.0 ***	-0.0148	-2.7 ***	-0.0443	-18.8 ***
Retired	-0.3675	-5.4 ***	0.2730	2.0 **	-0.5708	-7.0 ***
Worker	-0.1167	-2.3 **	0.1687	1.5	-0.1620	-2.8 ***
Unemployed	-0.5400	-7.7 ***	-0.2542	-1.9 *	-0.4670	-5.3 ***
Year=1989	0.1493	3.4 ***	0.0979	1.3	0.1668	3.2 ***
Year=1994	0.0096	0.2	-0.2703	-3.5 ***	0.1263	2.4 **
Year=1999	-0.1164	-2.4 **	-0.3175	-3.3 ***	-0.0011	0.0
Year=2003	-0.0013	0.0	-0.2419	-2.8 ***	0.0739	1.3
5,000 < Home exemption ≤ 10,000	0.0210	0.5	-0.0683	-0.9	0.0276	0.5
10,000 < Home exemption ≤ 30,000	0.0741	1.5	-0.0304	-0.3	0.1277	2.0 **
Home exemption > 30,000	0.0958	1.7 *	0.0389	0.4	0.0932	1.3
Unlimited Home exemption	0.0920	1.6 *	0.0725	0.7	0.1370	2.0 **
Garnishment	0.1354	0.8	-0.2154	-0.8	0.2242	0.9
Judicial Foreclosure	0.0369	1.0	-0.0372	-0.6	0.0392	0.8
Intercept	-1.2979	-11.0 ***	-2.3940	-10.5 ***	-0.8210	-5.5 ***
Wald Chi-Square		4,282 ***		2,067 ***		1,850 ***
Pseudo R^2		0.141		0.202		0.095
N	33,923		21,751		12,172	

TABLE 9 (Con.)

2. GLS regressions of the dollar amount of non-collateralized debt
GLS Random Effects Clustered by Family

	Combined Families		Black Families		White Families	
Independent Variables	Coefficient	z	Coefficient	z	Coefficient	z
Black	-2,183.2	-5.8 ***				
Holds transaction account	-313.5	-0.7	-646.5	-1.7 *	-115.8	-0.2
35 ≤ Age < 55	1,204.2	3.4 ***	-117.6	-0.3	1,854.0	3.8 ***
55 ≤ Age ≤ 75	3,010.9	4.9 ***	-882.2	-1.3	4,778.3	5.7 ***
Education= High School, no Coll.	800.2	1.7 *	-565.1	-1.2	1,524.1	2.2 **
Education= College, no degree	2,047.7	4.1 ***	690.0	1.4	2,799.8	3.9 ***
Education= College degree	5,593.1	10.6 ***	3,781.1	6.2 ***	6,473.7	8.9 ***
Married	1,968.5	2.4 **	4,359.0	5.0 ***	1,187.9	1.0
Single Female	-71.1	-0.1	1,175.1	2.3 **	-794.1	-1.1
Number of Children	-334.5	-2.3 **	-268.8	-1.9 *	-407.4	-2.0 **
Number of Outside Dependents	-104.1	-0.8	692.1	3.5 ***	-282.7	-1.6 *
Public Assistance	-498.7	-0.7	-215.5	-0.4	-1,205.4	-0.9
Health Excellent Or Good, Head	-595.5	-1.1	-231.7	-0.5	-844.3	-1.1
Health Excellent Or Good, Wife	-1,350.2	-1.8 *	-3,075.6	-3.9 ***	-623.7	-0.6
Own Home	2,565.2	6.7 ***	2,321.6	5.7 ***	2,733.2	5.1 ***
Real Income/$10,000	1,595.1	29.4 ***	1,001.5	12.9 ***	1,727.6	25.4 ***
Real Wealth/$10,000	-1,022.3	-46.1 ***	-611.4	-18.5 ***	-1,123.6	-40.2 ***
Retired	-6,085.7	-7.0 ***	-4,301.9	-4.1 ***	-5,701.9	-4.8 ***
Worker	-8,267.7	-14.2 ***	-4,901.9	-5.7 ***	-9,081.7	-12.6 ***
Unemployed	-4,467.2	-5.4 ***	-2,786.7	-2.8 ***	-4,603.7	-4.0 ***
Year=1989	1,003.3	2.0 **	811.3	1.5	1,175.9	1.7 *
Year=1994	4,111.7	8.1 ***	4,046.7	7.3 ***	4,311.2	6.1 ***
Year=1999	5,197.0	9.1 ***	5,013.8	7.6 ***	5,283.4	6.7 ***
Year=2003	7,696.6	14.4 ***	7,413.4	12.8 ***	8,025.4	10.8 ***
5,000 < Home exemption ≤ 10,000	-23.6	-0.1	-239.3	-0.4	16.2	0.0
10,000 < Home exemption ≤ 30,000	-535.2	-0.9	-478.3	-0.8	-670.3	-0.8
Home exemption > 30,000	-772.0	-1.2	245.0	0.3	-1,228.7	-1.4
Unlimited Home exemption	101.4	0.2	1,964.3	2.5 **	-898.6	-1.0
Garnishment	3,101.1	1.5	28.4	0.0	6,838.8	2.1 **
Judicial Foreclosure	-214.8	-0.5	-9.6	0.0	-282.2	-0.5
Intercept	6,096.2	4.4 ***	4,119.6	2.5 **	4,907.4	2.5
R^2	0.176		0.172		0.182	
N	17,332		5,244		12,088	

*p < .10. **p < .05. ***p < .01.
SOURCE: PSID data and the author's calculations.

Appendix: Description of Variables

Race: Black head of household = 1; White head of household = 0

Age: Years

Education of household head (spouse):

- Less than High School
- High School Only
- High School Plus College (No Degree)
- College Degree

Own home in 1989: yes = 1; no = 0

Health of head (spouse): excellent, very good or good = 1; fair or poor = 0

Type of Household:

- Male single, divorced, or separated
- Female single, divorced, or separated
- Married couple not separated

Inheritances or gifts received, 1989-94: dollar amount

Children younger than 18 years old in residence: number

Number of dependents outside of family: number

Employment category: worker, retired, self-employed or unemployed

Public Assistance: If the household head or spouse received ADC/AFDC, SSI, or other welfare. yes = 1, no = 0